

2003 Water Quality Data for Cayucos WTP

Tables 1,2,3,4, 5, 6, and 7 list all of the drinking water contaminants that were detected from **January 2003 through December 2003**, unless otherwise noted. The presence of these contaminants in water does not necessarily indicate that the water poses a health risk. The DHS requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the

Table 1 - Treatment of Surface Water Sources	
<p>Turbidity Performance Standard - Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.</p> <p>Turbidity of filtered water must:</p> <ol style="list-style-type: none"> 1. Be less than or equal to 0.3 NTU in 95% of measurements in a month. 2. Not exceed 1.0 NTU for more than eight consecutive hours. 3. Not exceed 5 NTU at any time. 	Treatment Technique for Cayucos Treatment
Lowest monthly percentage of samples that met Turbidity Performance Standard 1.	100%
Highest single turbidity measurement during the year (<i>Treatment Plant Combined Filter Effluent</i>).	0.20 NTU
The number of violations of any surface water treatment requirement.	0

Table 2 - Microbiological Contaminants					
Contaminant (reporting units)	MCL	PHG (MCLG)	Range	Average	Potential Source of Contamination
Total Coliform Bacteria (MPN/100mL) (CSA-10A Distribution System)	More than 1 sample in a month with a detection	(0)	ND	ND	Naturally present in the environment.
Heterotrophic plate count (CFU/mL) (Distribution System)	TT = adequate disinfection (HPC < 500 CFU/mL)	(0)	<1 - 10	2	Naturally present in the environment.

Table 3 - Detection of Contaminants with a <u>Primary</u> Drinking Water Standard					
Aluminum (ppb)	1000	600	130 - 600	390	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	50	-----	ND - 3	2	Runoff from orchards; natural deposits
Fluoride (ppb)	2000	1000	270 - 430	340	Erosion of natural deposits
Gross Alpha Particle Activity (pCi/L)	15	-----	ND—2.50 (2001)	1.3	Erosion of natural deposits
Nitrate as NO3 (ppm)	45	45	ND - 1.0	0.73	Runoff and leaching from fertilizer use; sewage; natural erosion

Table 4 - Detection of Contaminants with a <u>Secondary</u> Drinking Water Standard					
Aluminum (ppb)	200	-----	130 - 600 (a)	390	Residue from some surface water treatment processes
Chloride (ppm)	500	-----	24 - 44	34	Runoff/leaching from natural deposits
Color (CU)	15	-----		1	Naturally occurring organic materials
Corrosivity (LI)	Noncorrosive	-----	0.4 - 0.8 Noncorrosive	0.6	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Manganese (ppb)	50	-----	ND - 86 (b)	5	Leaching from natural deposits

Table 4 - Detection of Contaminants with a Secondary Drinking Water Standard (Continued)

Contaminant (reporting units)	MCL	PHG	Range	Average	Potential Source of Contamination
Odor – Threshold (TON)	3	-----	0 - 2	1.3	Naturally occurring organic materials
Specific Conductance (micromhos/cm)	1600	-----	530 - 740	660	Runoff/leaching from natural deposits
Sulfate (ppm)	500	-----	39 - 74	55	Runoff/leaching from natural deposits
Turbidity (NTU) (Distribution System)	5	-----	0.05 - 2.9	0.18	Soil Runoff
Total Dissolved Solids (ppm)	1000	-----	410 - 480	450	Runoff/leaching from natural deposits

Table 5 - Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors—Distribution System

Total Trihalomethanes (ppb)	100 (RAA) (c)	-----	62.8 - 100.1	79.2 (RAA)	Byproduct of drinking water chlorination.
Haloacetic Acids (ppb)	-----	-----	18.2 - 35.1	28.5 (RAA)	Byproduct of drinking water disinfection.
Chlorine (ppm) (Distribution System)	MRDL = 4.0 (as Cl ₂)	MRDLG = 4	0.51 - 1.61	1.21	Drinking water disinfectant added for treatment.

Table 6 - Detection of Contaminants without a Drinking Water Standard

Alkalinity as CaCO ₃ (ppm)	-----	-----	230 - 350	280	Runoff/leaching from natural deposits; seawater influence
Boron (ppb)	AL = 1000	-----	69—140 (2002)	97	State regulations require us to monitor this contaminant while the
Calcium (ppm)	-----	-----	40 - 59	50	Runoff/leaching from natural deposits; seawater influence
Hardness (ppm)	-----	-----	250 - 330	300	Generally found in ground and surface water
Magnesium (ppm)	-----	-----	35 - 47	41	Runoff/leaching from natural deposits; seawater influence
pH	-----	-----	7.38 - 8.42	7.9	Runoff/leaching from natural deposits; seawater influence
Sodium (ppm)	-----	-----	32 - 47	38	Runoff/leaching from natural deposits; seawater influence
Vanadium (ppb)	AL = 50	-----	4.0—6.8 (2002)	5.4	State regulations require us to monitor this contaminant while the

Table 7 - Detection of Lead and Copper in Cayucos Homes

Contaminant (reporting units)	AL	MCLG	Number of Samples Collected	Sample Date	90th Percentile Level Detected	Number of Sites Found Above the AL	Potential Source of Contamination
Lead (ppb)	15	2	10	Aug/Sep 2002	ND	0	Internal corrosion of household water plumbing systems
Copper (ppb)	1300	170	10	Aug/Sep 2002	110	0	Internal corrosion of household water plumbing systems